

## Abstract

5 Detecting a boundary between training sequences in a transmission  
is an important operation. In many communications systems, there are no  
special boundaries or markers to denote the end of one sequence and the  
beginning of another. Correlation has been a commonly used technique to  
detect sequences and a fall in the correlation can be used to indicate such  
boundaries, but classical correlation can be slow and a significant portion of  
10 the new sequence is received prior to the boundary being detected. A  
method and apparatus is presented that allows rapid detection of the  
boundary and only a small amount of the new sequence needs to be  
received prior to the detection of the boundary. Additionally, the method and  
apparatus can be used to detect the presence of a transmission on the  
15 communications medium.